



# RAIN GARDEN DESIGN & INSTALLATION

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#### SITING THE RAIN GARDEN

How does water flows across the landscape when it rains?

Site rain garden between the "source" and "destination."

Use existing impervious areas to direct water towards the rain garden (rooftop, driveway, sidewalks, compacted lawn)



#### SITING THE RAIN GARDEN



- > 10 ft. from building foundation
- > 25 ft. from septic system drain field
- Avoid shallow water tables< 18 in. deep</li>



- Call #811! Ensure no buried cables or pipes in the excavation area
- In full to partial sun, if possible

# GETTING WATER TO THE RAIN GARDEN Carolina











## GETTING WATER TO THE RAIN GARDEN Carolina





**Downspout** 

**Downspout Extender** 

**Corrugated Pipe** 



# GETTING WATER TO THE RAIN GARDEN Carolina

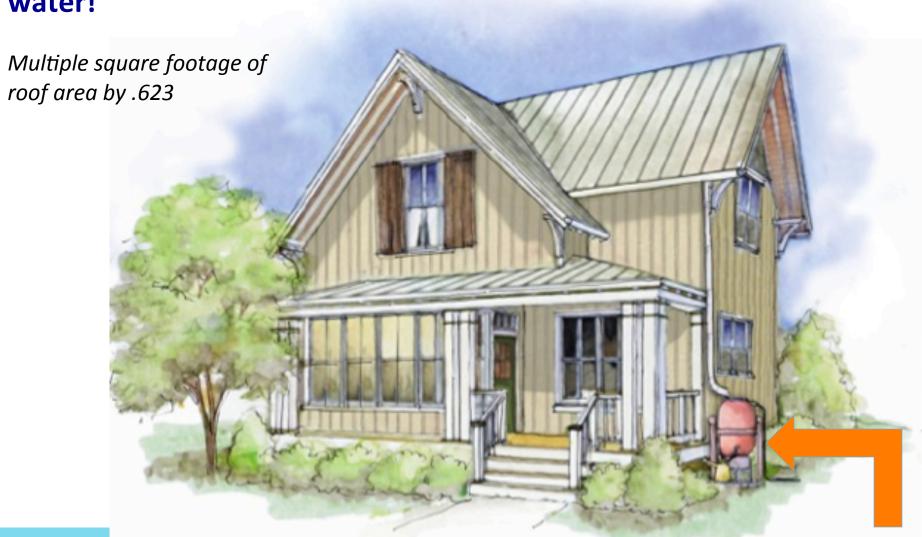


Direct rain barrel or cistern overflow to rain garden





During a one inch rainfall, a 1000 square foot roof can yield over 600 gallons of water!







# GETTING WATER TO THE RAIN GARDEN





Site rain garden within close proximity of rain barrel or cistern

### GETTING WATER TO THE RAIN GARDEN





Use egg rock or river rock to dissipate energy where water enters the rain garden

If using sheet flow as source of water; make rock channels in berm

#### RAIN GARDEN SHAPE



Excavate down 6 to 10 inches

Many hands (& proper equipment) make lighter work





#### RAIN GARDEN SHAPE





Try kidney bean or curved shape

At least 8 to 10 feet wide in direction of flow

#### RAIN GARDEN SHAPE



Build a berm around the perimeter of the shape (pack tightly)



Berm varies in height and width.

Typically no more than 5 inches high and 12 inches wide

#### **AMEND SOILS & PLANT**









#### DON'T FORGET TO MULCH!



Non-floating mulch Cedar generally most recommended



#### **CREATING FLOW**





- Overflow can be a 1 to 2 inch dip in the berm
- Stabilized with rock
- Opposite inflow

When the rain garden is over full, water needs a place to go (avoid damage to berm, mulch, etc)

An overflow can direct water out of the rain garden onto an adjacent pervious surface (lawn, landscaped area)

#### WATER





Plants will need to be observed and watered the first couple of weeks after planting

Dependent upon time of year & local rainfall patterns could be less or more

#### **BEFORE & AFTER**





Dorchester County Government Building, Summerville

#### SIGNAGE? COMMUNICATION?









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